Final Visual Presentation
for the degree of
Master of Visual Arts

Industrial Design

James Budd

1982

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled:

Final Visual Presentation

submitted by James Budd

in partial fulfilment of the requirements for the degree of Master of Visual Arts.

Date: May 4, 1982

DEPARTMENT OF ART & DESIGN

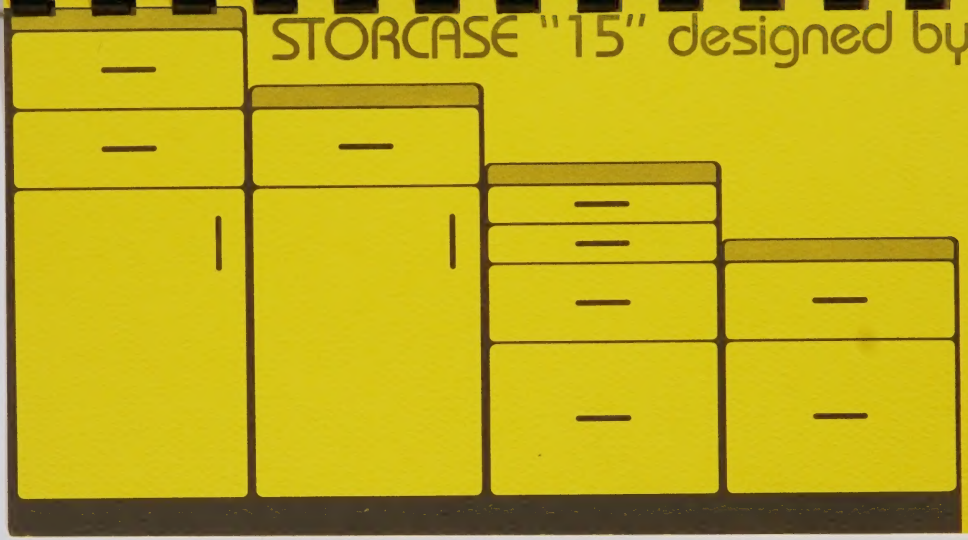
MASTER OF VISUAL ARTS PROGRAM

INDUSTRIAL DESIGN MAJOR

DOCUMENTATION OF THESIS PRESENTATION

JIM BUDD - MAY 1982

STORCASE "15" designed by Jim Budd



MVA Industrial Design
Graduate Exhibition,
Sub Art Gallery,
Student Union Building,
The University of Alberta,
Edmonton. (403) 432-4547

Opening Reception:
8:00 pm. May 4th.
Exhibition:
May 4th - May 14th
Weekdays: 11 am. - 5 pm.
Weekends: 1 pm. - 5 pm.

LIST OF SLIDES

SLIDE #	DESCRIPTION
1 - 8	Full scale prototypes (ABS panels, wood, acrylic laquer)
9 - 12	Wooden molds and vacuum formed plastic panels for modular cases
13, 14	Full scale maquettes (expanded polystyrene)
15 - 19	Models, scale = 1 : 10 (wood, acrylic laquer)
20	no slide
21 - 32	Series of scale models (photographs showing range of possible applications for modular components)
33 - 38	Series of scale models (photographs showing possible room settings based on standard modular components)
39, 40	no slides

PROJECT STORCASE

To take full advantage of the opportunity presented by a self-structured thesis project, considerable time was spent developing a thorough project format. The project was designed to meet the following criteria:

1. the project should be an extension of existing knowledge and skills,
2. the project should be based on well-researched information,
3. the work should involve experimentation,
4. the results of the project should have practical implications and should be based on an economically feasible technology,
5. the project should be of social relevance in that the results could potentially improve a current problem situation.

One of my main concerns was to develop a project proposal that would deal with a situation common to many people. With this in mind, I chose to investigate a particular aspect of the home environment. The primary objective of the project was to develop a prototype of a flexible, modular storage system that could be assembled to adapt to a variety of user requirements.

The idea for this project is a synthesis of several years involvement in different, yet related aspects of design. The concept of product systems and modular design has always seemed to make a great deal of sense in terms of economy and flexibility. Modular design allows for standardization and the application of mass production techniques to produce an economical product. The design of a product system provides flexibility for a variety of requirements. My past experience in the development of furniture systems and the design of domestic appliances has repeatedly verified this belief.

The goal of the project was to develop not only an affordable and flexible product system but one that would also satisfy today's user requirements. Recent developments in the office environment provide an idea of the potential impact of a similar concept applied to the domestic environment. Modern office systems achieve efficient and maximum usage within varying spatial situations by adapting modular components to numerous work station requirements. Today, with housing costs on the increase, more and more people are opting for smaller, affordable dwellings. A modular system would be particularly useful in such a situation by functioning as storage and work units in both the work and leisure areas of the home.

The resulting prototype component system is comprised of work surfaces and storage elements. The system could be designed to accommodate mechanical systems, electrical systems and appliances. The concept work was developed through research of existing modular systems, sketches and models. Full-scale prototypes were constructed to test and evaluate each component of the system.

The initial phase of the prototype involved the development of modular units in vacuum-formed plastic. This material was chosen because of its durability, flexibility and light weight. The vacuum-forming process is relatively inexpensive, simple and fast. The components are adaptable and allow for the development of wall-mounted units, free-standing units and mobile units. They may be extended both horizontally and vertically to adapt to varying space requirements.

Accessory components have been designed to 'plug into' the system. A simple fastening method is used to attach components including counter tops, drawers, shelves, and cupboard doors. Interchange of components and height adjustments are some of the system's features.

Should this modular system prove marketable, production costs could be reduced by manufacturing the plastic components using the reaction injection molding process (RIM). This process is only viable in a high volume production situation because of high initial tooling costs. In addition, the RIM process would simplify construction of the units and increase their strength.

- Jim Budd
  1981/82